***NATIONAL WEATHER SERVICE***
***PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)***
***TYPE: Official Product***
***DATE: January 28, 2003***

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TROPICAL PACIFIC MEAN SEA-SURFACE TENPERATURE (SST) OUTLOOK

## Part 1 - Mission Connection

1. **Product/Service Description:**
   The Climate Prediction Centers (CPC) climate outlook techniques rely significantly upon the slowly varying global SST field and do have useable accuracy at long lead times. These SST outlooks make tangible the results of research activities by many scientists over several decades on the subjects of El Nio, ocean-atmosphere interaction, etc.

2. **Purpose/Intented Use:**
   This discussion provides technical insight to further assist decision makers.

3. **Audience:**
   The audience is primarily decision makers with some technical background in weather and climate sensitive activities sensitive to inter-seasonal and inter- annual climate variation (e.g. weather risk management, energy/utilities, agriculture, hydrology, etc.).

4. **Presentation Format:**
   CPC presents the product in text sent over NWS dissemination systems and on the CPC web site.

5. **Feedback Method:**
   E-mail both Robert.Leffler@noaa.gov and Barbara.Mayes@noaa.gov.

## Part 2 - Technical

1. **Format and Science Basis:**
   CPC issues 13 three-month mean SST outlooks for the Nio 3.4 area of the central Pacific (5 °N to 5 °S and 120 °W to 170 °W) for each valid three-month period. CPC provides the outlooks in departure from the climatological normal SST in tenths of a degree Celsius. See NWS Instruction 10-1004 (Climate Means) for details on SST normals. The official outlook is labeled as "consolidated." CPC considers the SST predictions from various guidance tools, which may be plotted and labeled, as well. CPC provides the 68 and 95 percent confidence intervals for the official outlook and defines the range within which 68 and 95 percent of the possible outlook outcomes are expected to lie. A lesser interval generally means higher expected skill. The following is a generic format. The "S" is for the sign (+ or -) of the anomalies and "X" is for the numbers in this generic representation.

TROPICAL PACIFIC MEAN SEA SURFACE TEMPERATURE /SST/ OUTLOOK NWS
CLIMATE PREDICTION CENTER CAMP SPRINGS MD 300 PM E-T FRI MO.# 20–
MEAN TEMPERATURE ANOMALY SST OUTLOOKS ARE IN TENTHS OF A DEGREE
CELSIUS FOR THE NINO 3.4 AREA OF THE TROPICAL PACIFIC /5N-5S AND 120W-170W/.
ANOMALIES ARE FROM 1971-2000 NINO 3.4 MEAN CLIMATOLOGICAL SST /CLM/.
THREE MONTH OUTLOOK PERIODS EG. JFM IS JANUARY THROUGH MARCH - FMA
FOR FEB. THROUGH APR. ETC SEE NOTES BELOW ON TYPES OF
OUTLOOKS TYPE MMM MMM MMM MMM MMM MMM MMM MMM MMM MMM MMM MMM MMM CONS SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X U68 SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X L68 SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X U95 SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X L95 SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X CCA SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X CA SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X NCEP SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X SX.X CLM XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.X NOTES:
CONS - OFFICIAL CONSOLIDATED OUTLOOK U68 - THE UPPER LIMIT OF 68 PERCENT CONFIDENCE INTERVAL FOR CONS L68 - THE LOWER LIMIT OF 68 PERCENT CONFIDENCE INTERVAL FOR CONS U95 - THE UPPER LIMIT OF 95 PERCENT CONFIDENCE INTERVAL FOR CONS L95 - THE LOWER LIMIT OF 95 PERCENT CONFIDENCE INTERVAL FOR CONS CCA - CANONICAL CORRELATION ANALYSIS OUTLOOK CA - CONSTRUCTED ANALOG OUTLOOK NCEP - COUPLED OCEAN/ATMOSPHERIC DYNAMIC MODEL OUTLOOK THIS PRODUCT IS AVAILABLE IN A GRAPHICAL FORMAT ON THE INTERNET AT
HTTP://WWW.CPC.NCEP.NOAA.GOV /LOWER CASE/
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2. **Availability:**
CPC issues the product once a month on the Friday from the 9th to the 15th of the month at around 3:00 p.m. Eastern local time. They do not issue updates or amendments. They will issue corrections as needed. CPC issues the product on NWS dissemination systems under the following product IDs:

WMO heading FXUS23 KWNC - AWIPS ID PMDSST

They are also issued on the CPC web site (in graphical format)
http://www.cpc.ncep.noaa.gov/products/predictions/90day/SSTs/.

3. **Additional Information:**

- Valid Time: CPC issues 13 SST outlooks with lead times from 0.5 months to 12.5 months. For example, in mid-January, CPC will issue three-month outlooks for February through April, March through May, April through June, and so on to February through April of the following year.
- Product Expiration Time: The 0.5 month lead time outlook expires at the beginning of the valid time of that outlook. The other outlooks expire when the next set of outlooks are issued (i.e. the Friday from the 9th to the 15th of the following month).
- Creation Software: CPC uses a text editor.